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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,976	12/18/2001	Michael Becker	6527	6592
7590 09/23/2005				
Samuels, Gauthier & Stevens LLP 225 Franklin Street, Suite 3300 Boston, MA 02110				
			EXAMINER	
			SONI, DEEPAK H	
			ART UNIT	PAPER NUMBER
			2666	

DATE MAILED: 09/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/023,976		BECKER ET AL.	
	Examiner		Art Unit	
	Deepak Soni		2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>Mar 25, 2002</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that forms the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims **1- 3, and 5** are rejected under 35 U.S.C. 102(e) as being anticipated by Ramfelt et al. (U.S. 5,946,315).

Regarding claim **1**, "a method for data transmission via several data channel in a network linking several units to one another, the units functioning as data sources, data sinks, or transceivers," is anticipated by a ring topology showing three separate channels as shown in (Figure 6) and spoken of on column 10 lines 25 – 30. "the method comprising the steps of: assigning a first data channel to a first predetermined one or more connection segments; assigning said first channel to a second predetermined one or more connection segments not including said first predetermined one or more connection segments; and simultaneously transmitting data between two units across said first predetermined one or more connection segments via said first data channel, and data between two or more other units across said second predetermined one or more connection segments via said first data channel." is anticipated by the reuse of same slots on different segments enabling simultaneous transmissions as shown in D, E, F and G of Figure 7 and spoken of on column 10 lines 31 – 43.

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Regarding claim 2, "the linear network topology" is anticipated in ring topology of Figure 7, where ring topology is the linear network where a two-way link between one node and the next.

Regarding claim 3, "the ring network topology" is anticipated by the ring topology 10 as illustrated in Figure 1.

Regarding claim 5, "data transmitted in only a first direction over said first predetermined one or more connection segments, and wherein data are transmitted in only a second direction over said second predetermined one or more connection segments, wherein said first direction and said second direction are the same direction" is anticipated by reuse of same slot on different channels there by enabling simultaneous transmission as illustration in Figure 7 and spoken of on column 10 lines 31 – 43.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramfelt et al. (U.S. 5,946,315) in view of Heck et al. (Media Oriented Synchronous Transfer – A Network Protocol for High Quality, Low Cost Transfer of Synchronous, Asynchronous, and Control Data on Fiber Optic).

Regarding claim 4, Ramfelt et al. (U.S. 5,946,315) teaches all the limitation of claims 1-3 except for the network being the Media Oriented System Transport or Media Oriented Synchronous Transfer (MOST) network. Heck et al. discloses (Media Oriented Synchronous Transfer – A Network Protocol for High Quality, Low Cost Transfer of Synchronous, Asynchronous, and Control Data on Fiber Optic) page 1, paragraph 1. At the time of the invention, it would have been obvious to someone of ordinary skill in the art given these references to perform the simultaneous data transmission of Ramfelt et al. in Media Oriented System Transport network as in Heck et al as spoken of on Page 1 Paragraph 1 of the Heck reference.

Regarding claim 6, Heck et al. teaches the limitation of claim 4 except for the data transmitted in a first direction over first predetermined one or more connection segments, and data transmitted in a second direction over second predetermined one or more connection segments, where first direction and said second directions are the same direction. Ramfelt et al. (U.S. 5,946,315) discloses by reuse of same slot on different channels there by enabling simultaneous transmission as illustration in Figure 7 and spoken of on column 10 lines 31 – 43. At the time of the invention, it would have been obvious to someone of ordinary skill in the art given these references to perform the first direction and second direction data transmitting over one or more connection segments of Ramfelt et al. in Media Oriented Synchronous Transfer Network as in Heck et al. as spoken of on Page 1 Paragraph 1 of the Heck reference.

5. Claims **9 and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramfelt et al. (US 5,946,315) and Heck et al. (Media Oriented Synchronous Transfer – A Network Protocol for High Quality, Low Cost Transfer of Synchronous, Asynchronous, and Control Data on Fiber Optic), and further in view of Taniguchi (US 2002/0009091).

Regarding Claim **9**, Ramfelt et al. and Heck et al. teaches the method of claims 4 and 6. Combination fails to explicitly teach, “first and second direction are clockwise around the ring network.” Taniguchi teaches bidirectional line switched ring as shown in Figure 31C. At the time of the invention, it would have been obvious to someone of ordinary skill in the art given these references to perform the simultaneous data transmitting of Ramfelt et al. in bi-directional line switched ring network as in Taniguchi on Media Oriented Synchronous Transfer (MOST) network as in Heck et al. in order to allow clockwise data transmission in a ring network as spoken of on Page 2 Paragraph 0049 lines 1-12 of the Taniguchi reference.

Regarding Claim **10**, Ramfelt et al. teaches the method of claims 4 and 6. Combination fails to explicitly teach, “first and second direction are counterclockwise around the ring network.” Taniguchi teaches bidirectional line switched ring as shown in Figure 31C. At the time of the invention, it would have been obvious to someone of ordinary skill in the art given these references to perform the simultaneous data transmitting of Ramfelt et al. in bi-directional line switched ring network as in Taniguchi on Media Oriented Synchronous Transfer (MOST) network as in Heck et al. in order to

allow clockwise data transmission in a ring network as spoken of on Page 2 Paragraph 0049 lines 1-12 of the Taniguchi reference.

6. Claim **7 and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramfelt et al. (US 5,946,315) in view of Taniguchi (US 2002/0009091).

Regarding Claim **7**, Ramfelt et al. teaches the method of claim 5. Ramfelt et al. teaches simultaneously data transmission in a ring network in Figure 7 as spoken of on column 10 lines 31 – 43. Ramfelt et al. fails to explicitly teach, “wherein said first and second direction are clockwise around the ring network.” Taniguchi teaches bidirectional line switched ring as shown in Figure 31C. At the time of the invention, it would have been obvious to someone of ordinary skill in the art given these references to perform the simultaneous data transmitting of Ramfelt et al. in bi-directional line switched ring network as in Taniguchi in order to allow clockwise data transmission in a ring network as spoken of on Page 2 Paragraph 0049 lines 1-12 of the Taniguchi reference.

Regarding Claim **8**, Ramfelt et al. teaches the method of claim 5. Ramfelt et al. teaches simultaneously data transmission in a ring network in Figure 7 as spoken of on column 10 lines 31 – 43. Ramfelt et al. fails to explicitly teach, “wherein said first and second direction are counterclockwise around the ring network.” Taniguchi teaches bidirectional line switched ring as shown in Figure 31C. At the time of the invention, it would have been obvious to someone of ordinary skill in the art given these references to perform the simultaneous data transmitting of Ramfelt et al. in bi-directional line switched ring network as in Taniguchi in order to allow clockwise

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data transmission in a ring network as spoken of on Page 2
Paragraph 0049 lines 1-12 of the Taniguchi reference.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deepak Soni whose telephone number is 571-272-2816. The examiner can normally be reached on 9:00Am - 5:00Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Seema S. Rao
Deepak Soni 9/20/05
Examiner
Art Unit 2666

DS

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SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600